

CLAIMS

What is claimed is:

1. A method of establishing a real time streaming media session between a first client with a local area network address and a second client, the method comprising:
receiving an invite message from the first client over an internet protocol channel, the invite message including identification of an IP address of the first client;
comparing a source IP address extracted from the internet protocol channel to the IP address of the first client;
establishing a relay server resource if the IP address extracted from the internet protocol channel does not match the IP address of the first client; and
providing identification of the relay server resource to each of the first client and the second client.

2. The method of claim 1, wherein the step of establishing a relay server resource comprises:
providing a relay server resource request message to a relay server; and
receiving a resource message from the relay server that includes identification of the relay server resource.

3. The method of claim 2, wherein:
the relay server request message is a SIP invite message;
the resource message is a SIP redirect message that includes a session description protocol payload that identifies the relay server resource.

4. The method of claim 1, wherein the step of providing identification of the relay server resource to the first client comprises including the session description protocol payload that identifies the relay server resource in a SIP OK message addressed to the IP address extracted from the internet protocol channel.

1 5. The method of claim 4, wherein the step of establishing a relay server resource
2 comprises:
3 providing a relay server resource request message to a relay server; and
4 receiving a resource message from the relay server that includes identification of
5 the relay server resource.
6

1 6. The method of claim 5, wherein:
2 the relay server request message is a SIP invite message;
3 the resource message is a SIP redirect message that includes a session
4 description protocol payload that identifies the relay server resource.
5

1 7. A proxy server for establishing a real time streaming media session between a
2 first client with a local area network address and a second client, the method
3 comprising:
4 a network interface for exchanging session messaging with remote devices over
5 an internet protocol network;
6 a session signaling module for receiving an invite message from the first client
7 over a designated internet protocol channel, the invite message including identification
8 of an IP address of the first client;
9 a comparison engine for comparing a source IP address extracted from the
10 internet protocol channel to the IP address of the first client;
11 a relay server resource engine for establishing a relay server resource if the IP
12 address extracted from the internet protocol channel does not match the IP address of
13 the first client; and
14 a messaging module for:
15 generating a an invite message to the second client that includes identification of
16 the relay server resource; and
17 generating a response message to the first client that includes identification of
18 the relay server resource.
19

1 8. The proxy server of claim 7, wherein the relay server resource engine
2 establishes a relay server resource by:
3 providing a relay server resource request message to a relay server; and
4 receiving a resource message from the relay server that includes identification of
5 the relay server resource.

1 9. The proxy server of claim 8, wherein:
2 the relay server request message is a SIP invite message;
3 the resource message is a SIP redirect message that includes a session
4 description protocol payload that identifies the relay server resource.

1 10. The proxy server of claim 7, wherein the response message to the first client is
2 addressed to the IP address extracted from the internet protocol channel and comprises
3 including the session description protocol payload that identifies the relay server
4 resource.

1 11. The proxy server of claim 10, wherein the response message is a SIP OK
2 message.

1 12. The proxy server of claim 10, wherein the invite message to the second client
2 includes the session description protocol payload that identifies the relay server
3 resource.